

AMENDMENTS TO THE SPECIFICATION:

Replace the paragraph at page 4, beginning at line 2, with the following amended paragraph:

The standardization activity ~~regarding~~ with regard to personal area ~~network~~ networks is discussed in the BT PAN Working group. The current BT Personal Area Network (PAN) profile only supports packet forwarding within one piconet. Issues regarding scatternet communication, such as how to switch between piconets (referred to as Inter-Piconet Switching, or IPS), and how to form a multi-hop network (referred to as Network Formation), and how to route packet within a scatternet (referred to as PAN routing) are still under discussion.

Replace the paragraph at page 10, beginning at line 9, with the following amended paragraph:

(2) Referring to Fig. 2B, the second assumption is that the PMP node (a node that participates in multiple piconets, but does not operate itself as a Master node in any one of the ~~piconet~~s piconets) accesses Master nodes in different piconets (PICONET₁,...,PICONET_n) for the same length of time.

Replace the last mathematical expression on page 11, at line 13, as follows:

$$\text{Master}_j \rightarrow \text{PMP}(S/M_k) \rightarrow \text{Slave}: \quad \frac{B}{B_o} = \text{MIN}\left(\frac{1}{M_k + 1}, \frac{1}{M_i}\right). \quad (4)$$

Replace the paragraph at page 12, beginning at line 10, with the following amended paragraph:

Based on the foregoing, the definition of a connectivity metric is as follows: the ratio of the maximum link bandwidth to the estimated link bandwidth, where the maximum link bandwidth is the link bandwidth between Master and Slave when there is only one Slave in the piconet. The estimated link bandwidth may be calculated by the formulas shown above. The detailed metric is ~~showed~~ shown in Table 1, which shows the connectivity metric for the different link status.